

REMARKS

Claims 34-40, 42-47, and 49-55 are pending in this case. In the aforementioned Office Action, the Examiner rejected claims 34-39 and 50-54 under 35 U.S.C. §103, objected to claim 55, and allowed claims 40, 42-47, and 49. In response, Applicant is submitting the following remarks in contention that the rejected and objected-to claims present subject matter that is distinguishable from the prior art of record, and are therefore also patentable. In view of the following remarks, Applicant respectfully requests that the Examiner reconsider the Application.

Allowable Subject Matter

In paragraph 2 of the Office Action, the Examiner gave reasons for allowing claim 40 (and therefore dependent claims 42-47 and 49). Applicant appreciates the Examiner's favorable decision.

In paragraph 3 the Examiner objected to claim 55, but indicated that he would allow it if it is rewritten in independent form. Applicant, as discussed below, believes that claim 34, from which claim 55 depends, is patentable, and therefore requests that the Examiner reconsider claim 55 in its dependent form.

Rejection under 35 U.S.C. § 103

In paragraph 6 the Examiner rejected claims 34-39 and 50-54 under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 5,333,313 to *Heising* in view of U.S. Patent No. 5,799,276 to *Komissarchik et al.*

Regarding claims 34, 50 and 53-53 the Examiner asserted that a "text entry" in the claimed invention is equivalent to either an "entry," an "inflection," a "definition," a

RECEIVED
OCT -8 1993
TECH CENTER 700

"pronunciation," a "part of speech," or a "usage note," etc., of *Heising*. As submitted in the Amendment dated May 4, 1999, Applicant respectfully re-submits that a claimed "text entry" is "part of a dictionary word," which is patentably distinguishable from each of an "entry," an "inflection," a "definition," a "pronunciation," a "part of speech," or a "usage note" in *Heising's* cited passage. As submitted in the Amendment dated May 4, 1999, using *Heising's* example of the word *factitious*, a "text entry" of the present invention can be "f," "a," "ac," "t," "i," "ous," etc. In contrast, in *Heising*, using the same exemplary word *factitious*, an "entry" is "factitious"; a "definition" is "something that has an effect," "gene," etc.; a "part of speech" is "factitious," "factitiously," or "factitiousness;" and a "usage note" is "used with 'into'" (column 6, line 32 to column 7 line 10). None of the possibilities for Applicant's claimed "text entry" is even close to the cited items. Therefore, the claimed "text entry that is part of a dictionary word" is patentably distinguished from *Heising*.

The Examiner also equated the claimed "a correspondence phoneme entry representing the pronunciation of the correspondence text entry" to *Heising's* "placeholders." As submitted in the Amendment dated May 4, 1999, Applicant re-submits that *Heising's* cited passage discloses extracting "placeholders" for each of *Heising's* "entry," "inflection," "definition," etc., wherein a placeholder is "an identifier which corresponds uniquely to each of the items above" (col. 3, lines 37-40). Thus, *Heising's* cited passage teaches the correspondence relationship between a "placeholder" and any one of the items "entry," "inflection," "definition," etc. *Heising* consequently does not teach, suggest, or make obvious that a "placeholder" might be a

claimed "phoneme entry," which represents the pronunciation of a word and is, for example, "IH," "n," " UX," and "f" for the word "enough" (Specification, page 16, lines 2-3). Because *Heising* does not teach, suggest, or make obvious a "phoneme," or a "phoneme entry representing the pronunciation," or a "text entry," *Heising* cannot teach, suggest, or make obvious Applicant's claimed "phoneme entry representing the pronunciation of the correspondence text entry."

The Examiner then conceded that "*Heising* . . . do [sic] not explicitly teach a correspondence symbol for use as a compressed data entry in generating said compressed pronunciation dictionary." The Examiner continued "[h]owever, *Komissarchik et al* teach . . . a phonetic dictionary 40 that comprises a series of entries for each word that is understood by the speech recognition system with entries corresponding to phonetic information." The Examiner concluded "it would have been obvious . . . to incorporate the compressed dictionary of *Komissarchik et al* in the device of *Heising* using a symbol to identify the entry because it would provide a faster way of retrieving information from the dictionary." While agreeing with the Examiner that *Komissarchik* discloses a dictionary comprising a series of entries for each word, and that each entry corresponds to phonetic information, Applicant respectfully traverses.

A "correspondence symbol" in the claimed invention is "for use *as a compressed data entry*" (emphasis added) in generating the compressed pronunciation dictionary. For example, the invention uses the symbol set "43 161 89 and 123" as the compressed data entry representing the dictionary word "enough" and the corresponding dictionary phonemes "IH n UX f" (Specification, page 17, lines 13-17). Similarly, the

invention adds the symbol set "169 222 47 120 16" or "169 222 47 120 223 155" as a symbol set representing the dictionary word "rhythm" and the corresponding phonemes "r IH D AX m" (Id, page 20, lines 10-12, lines 22-25).

In contrast, *Komissarchik* does not disclose a compressed dictionary as asserted by the Examiner, but discloses an apparatus and method which uses a "*speaker-independent dictionary* based upon the application of phonological and phonetic/acoustic rules to generate acoustic event transcriptions" (Abstract, emphasis added).

Further, the cited passages of *Komissarchik* from col. 37; line 54 to col. 38, line 40 disclose "[t]he entries in dictionary 40 are initially generated from orthographic and phonetic baseform words, and the complete dictionary is then maintained as a static part of the overall system 10" (col. 37, lines 62-65). These passages also disclose "selecting a baseform vocabulary" wherein a noun has various forms, such as "singular nominative," "singular genitive," "plural nominative," etc., and a verb has various forms, such as "bare infinitive," "s-form," "ing-form," etc. (col. 38, lines 3-23). These passages then disclose "ascribing grammatical features to vocabulary" in which "every grammatical word has a six features associated with it, which are encoded by integers 0-6. Feature numbers 0 and 4-5 are universal for all words, while grammatical features encoded for features 1-3 are not universal, but instead depend upon the syntactic class of the word" (col. 38, lines 32-40). None of *Komissarchik's* cited passages discloses, as claimed, "a correspondence symbol" which is used to identify the "correspondence set," or "as a compressed data entry" (emphasis added) in generating the compressed dictionary.

Based on the above-discussion, claim 34 is patentably distinguishable from *Heising* and *Komissarchik*, taken either alone or in combination, and is therefore patentable.

Claims 35-39 and 55 depend from claim 34, and are therefore patentable for at least the same reasons as claim 34.

Claim 36 adds the limitation "wherein said tuning function *eliminates* redundant *correspondence sets* and low usage *correspondence sets* from said correspondence table" (emphasis added). As submitted in the Amendment dated May 4, 1999, Applicant re-submits that even though *Heising's* cited passage discloses using an escape code followed by a literal word number to eliminate *an entry* from his translation table (col. 4, lines 52-55), *Heising* does not disclose, suggest, or make obvious *that an entry in his translation table* includes "a correspondence text entry," a "correspondence phoneme entry" and "a correspondence symbol" as does a "correspondence set" of the claimed invention. Because the claimed invention's "set" is patentably distinguishable from *Heising's* "entry", claim 36 is patentable for this additional limitation.

Claim 37 adds the limitation "wherein said correspondence table includes said correspondence sets for all practical combinations of said correspondence text entries and said correspondence phoneme entries for a given language." As submitted in the Amendment dated May 4, 1999, Applicant re-submits that, because *Heising* does not disclose, suggest, or make obvious using a correspondence phoneme entry or a correspondence text entry, *Heising* cannot disclose, suggest, or make obvious the claimed "practical combinations of said correspondence text entries and said

correspondence phoneme entries." Therefore, claim 37 is patentable for this additional limitation.

Claim 39 adds the limitation "wherein correspondence phoneme entries of said grouping are similar to one another in pronunciation." As submitted in the Amendment dated May 4, 1999, Applicant re-submits that *Heising's* cited passage discloses the concepts of "recurring pattern," verbs having "four inflected forms," and that "some of the constituent parts occur much more frequently than the others," but *Heising* does not teach, suggest, or make obvious grouping *phonemes* that are *similar* to one another *in pronunciation*. Therefore, claim 39 is patentable for this additional limitation.

Claim 50 recites the limitation "wherein said correspondence symbol is for use as a compressed entry in generating a compressed pronunciation dictionary," which is not taught, suggested, or made obvious by *Heising* and *Komissarchik*, taken either alone or in combination. Therefore claim 50 is patentable.

Claims 51-54 depend directly or indirectly from claim 50, and are therefore patentable for at least the same reasons as claim 50.

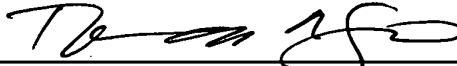
Claim 53 adds the limitation "inputting a correspondence text entry that is part of a dictionary word," which is not taught or made obvious by *Hesing* (discussed above). Therefore, claim 53 is patentable for this additional limitation.

CONCLUSION

Applicant contends that the rejection of claims 34-39 and 50-54 is fully overcome, and therefore respectfully requests that the Examiner withdraw the cited rejection and pass the application to issuance. If the Examiner has any questions regarding this case, the Examiner is invited to contact Applicant's undersigned attorney.

Respectfully submitted,
Timothy J. Fredenburg

Dated: 9/27/99

by: 
Tuan V. Ngo, Reg. No. 44,259
Carr & Ferrell, LLP
2225 East Bayshore Road, Suite 200
Palo Alto, CA 94303
Telephone: (650) 812-3400
Facsimile: (650) 812-3444